A New International Monetary System Will Bring Greater Global Financial Stability

Joe Remache

Master of Science in Finance Candidate

Master's Thesis

May 18, 2022

Saint Peter's University

To my mom and brother for their endless support in my academic endeavors.

Joe Remache was a Economics major at Saint Peter's University who graduated in 2020. He is graduating from the Master's of Science in Finance from Saint Peter's University in May 2022 with a concentration in Global Finance.

Table of Contents

Introduction……………………………………………………………....4

Chapter One: Proposed Soultions..……………………………………7

Chapter Two: Origin of the Bretton Woods System…………………..15

Chapter Three: International Clearing Union and Bancor…………….30

Conclusion…………………………………………………………….38

Introduction

Globalization of markets and enterprises has characterized the post-war economic development of the global economy, resulting in national economies becoming increasingly interdependent in the global economy. The international monetary system (IMS) most fundamentally embodies the financial environment that involves financial institutions, multinational corporations, and investors which facilitates international economic exchange via cross-border payments, exchange rates, and capital mobility. In this thesis, I will argue that a new international monetary system will bring greater global financial stability. The basis for this argument lies in that the current international economy has been characterized by global imbalances that occur from a national currency serving as the reserve currency of the system. This results in emerging and developing economies facing difficulties to become developed and, in turn, further increases global imbalances.

While there has been no meaningful reform to the current international monetary system since the collapse of the Bretton Woods system, as has been customary following an international financial crisis, there is nonetheless a substantial critique of the current structure concerning the availability of liquidity, specifically U.S. dollar-based, in the financial system to meet current payment obligations. The instability of the system stems from its reliance on a national currency as the global reserve asset, meaning that all other countries have to earn and hold U.S. dollars, implying that they must export more goods and services to receive U.S. dollars. This shows that to maintain the global economy operating there needs to be adequate currency circulation, which leads to inflation so if the reserve currency country decides to focus on domestic monetary policy and limit the issuing of more currency, the global economy suffers.

A call for international monetary system reform was made following the Global Financial Crisis in 2008, which showed that the crisis affected the world through its spillover contagion. The Governor of the People's Bank of China, Zhou Xiaochuan, advocated that an international reserve currency should be anchored to a stable benchmark and issued following a clear set of rules, the currency should be flexible to adjust to changing demand and be disconnected from economic conditions or interests of a single currency. He pointed out that "the frequency and increasing intensity of financial crisis following the collapse of the Bretton Woods system suggest the costs of such a system to the world may have exceeded its benefits" (Xiaochuan 2). There is a further emphasis that more importance should be placed on a created international reserve currency, SDRs, that is not connected to an individual national currency. However, this may not necessarily lead to a solution as SDRs, "is more a unit of account than a currency and whose value is itself linked to that of a weighted basket of four major currencies." (Chandraskekhar 47). One of the major issues with the current international monetary system was pointed out by Robert Triffin.

Before the collapse of the Bretton Woods system, Triffin saw that the system would collapse based on an issue of liquidity and confidence. He forecasted that "if the United States continued to run deficits, its foreign liabilities would inevitably come to exceed by far its ability to convert dollars into gold upon demand and would bring about a "gold and dollar crisis" (Triffin 2). Since the Bretton Woods system, the current system has not liberated itself from similarities that led to the demise of Bretton Woods. Currently, the system has systemic instability, as a result of "a combination of selfish policies implemented by both the anchor and developing countries that bring about overinvestments in the U.S." (Campanella 9). These issues

might have been prevented if rather than the Bretton Woods system, a proposal by Keynes at the Bretton Woods conference would have been accepted.

The remedies to alleviate the flaws of the international monetary system have ranged from dollarization to currency blocs but they do not necessarily address the flaws embedded in the system. Instead, it is argued that a more stable international monetary system would have resulted if the International Clearing Union by Keynes had been accepted at the Bretton Woods conference. This system would bring greater balance to the global economy, “the limited role for private financial institutions in international payments would reduce the potential for speculative flows and exchange rate volatility” (D’Arista 568). The proposal by Keynes, envisioned countries having balanced current accounts and where capital flows would be reduced to not endanger the global balance of payments. A look into a system that in order “to reach international balance, Keynes devised a sophisticated international currency scheme, designed for taming conflicting national interests”, would be of benefit to the present international monetary system that is considered decentralized, with individual countries pursuing self-interests rather than the stability of the global economy (Costabile 11).

The structure of this paper is as follows, first, it will cover the proposed solutions to making the international monetary system a more stable system and will explain why these are not adequate to tame the present system and present flaws of their own. Then a look at the role of the U.S. during the Bretton Woods system and its resemblance to the current system that still holds the U.S. and the dollar at the center of the system. The paper concludes with an overview of the proposal made by Keynes of an International Clearing Union and describes how it could provide a more stable international monetary system or use aspects of its framework to alleviate the flaws in the current international monetary system.

Chapter One

As currently constructed, the international monetary system (IMS) embodies the financial environment that involves financial institutions, multinational corporations, and investors which facilitates international economic exchange via cross-border payments, exchange rates, and capital mobility. The importance of the international monetary system is that a stable system is necessary for sustainable economic growth and maintaining financial stability. Currently, the U.S. dollar serves as the main international reserve currency, making it the heart of the international monetary system.[1] Furthermore, most commodities are priced in the reserve currency, causing many countries to hold the currency to pay for those goods. However, Robert Triffin believed that the dollar could not survive as the world's reserve currency without consequences to the issuing country, which is true for any national currency that serves as the international reserve currency.

The Triffin Paradox

The international monetary and financial systems today are not based on a single currency but on multiple currencies, yet, despite this, there is still a heavy concentration of the U.S. dollar. This is subject to the Triffin Paradox, which says that in order to have an expanding global economy there needs to be an increasing amount of that reserve currency in existence. Yet, at the same time, nations generally desire for the reserve currency to have a stable value, which makes the Paradox arise in that it is impossible to reconcile increasing amounts of international liquidity with a stable international monetary value. The effect on the country providing the increase in currency means it becomes less competitive in the exporting industries, leading to a perpetual trade deficit. On the other hand, if the reserve currency country decided to

[1] The reserve currency is the currency that is maintained by central banks and financial institutions for the purpose of investments, international debt obligations, or to influence their domestic exchange rate.

focus on domestic monetary policy and not issue more currency the global economy suffers and exchange rates will become more volatile since the system does not have sufficient liquidity to meet the needs of international trade. Therefore, there is an issue between short-term domestic policy incentives and a stable short and long term international monetary system.

Key issuers and holders of reserve currencies tend to pursue domestic needs ignoring the negative effects it has on other countries producing “unsustainable imbalances and fuel vulnerability in the global financial system” (Smaghi 5). Being a reserve currency means a tradeoff between pursuing domestic goals and international objectives so a system disconnected from a national currency would create fewer imbalances. In the current international monetary system imbalances occur from the demand for safe U.S. assets from emerging markets, increasing reserve accumulations. This shows that the Triffin Paradox is still relevant as the U.S. dollar is still sought as a safe haven.

As a corollary to this issue is that the current international monetary system only has a single adjustment mechanism for solving international imbalances, and that is through a deflationary bias. Indeed, if a country is running a trade deficit, the only way that possibly exists to return to external equilibrium is to typically implement austerity measures to reduce investment and consumption, which lowers income and thus imports until exports are greater than imports and a trade surplus is restored. Also, the single adjustment mechanism is seen as an asymmetrical-adjustment problem that lays all the burden on the deficit countries to balance external accounts when financing is not available.

Policy Coordination

Some suggested solutions to this issue of the Triffin Paradox is to engage in international cooperative policies, although they are difficult to achieve and effects might not be enough. The

aim of aligning currency relations and macroeconomic conditions is that it will reduce current account surpluses or deficits that cause global imbalances. In addition, a further difficulty that arises from coordinating policies is that the imbalances are now considered multilateral because the amount of imbalances are now much larger in countries and regions around the world and the integration of developing economies and their policy preferences shows that cooperation would need to be different for developing and developed countries. Thus, "rules that require multiparty coordination to "stabilize" exchange rates are likely to fail and cause more problems than they solve" (Plosser 2). For example, many emerging countries follow an export-led development strategy, which consists of seeking economic development by opening up to international trade through a heavy focus on exports. Often these countries will want to prevent their currency from appreciating as it would cause those goods to lose competitiveness in the global market. Therefore, there is a heavy focus on exchange rates and imbalances and the need for coordination is largely shunned.

Yet, among developed countries there is still a call for international coordination in which central banks establish exchange rates that will decrease the volatility of capital that occurs separately from different monetary policies. The U.S. still being at the center of the international monetary system means that the Federal Reserve is the most important central bank because its decisions affect the exchange rate and trade balances with other countries. This implies that if developed countries get their way there is a sharp incentive for them to diverge their geopolitical futures from developing nations as shown by the creation of groups, such as the Group of Five (G5) and Group of Seven (G7). The Group of Five was established in the mid-1970s to coordinate the economic policies of France, Germany, the United Kingdom, Japan, and the United States. Since its existence, the most famous attempt of coordination was the Plaza

Agreement in September 1985, which sought to weaken the U.S. dollar to reduce its increasing trade deficit. Furthermore, the purpose of a weakened dollar was intended to correct the trade imbalances with Germany and Japan, and "the Plaza is justly celebrated as a high-water mark of international policy coordination" (Frankel 2). After the conference meeting, the call for more monetary cooperation intensified among the Group of Seven which included the G5 and the addition of Italy and Canada. These meetings consisted of "Finance ministers from the G-7 countries now meet regularly to discuss the current and prospective performance of their economies; policy objectives and instruments are evaluated for possible linkages and repercussions" (Cohen 245). The addition of Canada and Italy was for better representation of North America and Europe to improve currency relations and macroeconomic conditions.

Similar to the agreement between the G5, two years later after the Plaza Agreement, the Louvre Accord was an agreement among the G-7. As mentioned, G-7 finance ministers along with Central Bank Governors signed an agreement in February 1987 intending to stabilize international currency markets and cease the decline of the U.S. dollar. One of the outcomes of this agreement was exchange rate targets amongst the seven economies that sought to improve the imbalance at that time, particularly the U.S. and Japanese one. These groups and two agreements show that the imbalances were previously first attempted to be solved within the developed economies with limited consideration for other countries and that international cooperation is hard to achieve amongst limited countries. Thus, including the cooperation of emerging markets and their different policy preferences would be a difficult task to accomplish.

The IMF's Special Drawing Rights

Another alternative to reforming the current international monetary system is the potential role that SDRs, the only true global reserve asset the world has created, can play

(Ocampo 212). Originally, the asset was created in the 1960s for international liquidity to supplement foreign exchange reserves which were gold and U.S dollars. Special drawing rights (SDRs) would take on a slightly different role, one that would give the reserve currency a more stable value. At present, the IMF is in charge of allocating SDRs and does this intending to supplement existing reserve assets. The criteria used by the IMF are based on a country quota with the IMF meaning that higher-income countries receive greater allocations. It is important to note that the SDR is neither a currency nor a claim to the IMF but an asset and liability to the IMF members. Furthermore, allocations can happen in two different ways, the first is as mentioned supplementing existing reserve assets, and the other "special allocation which are typically one-time measures, intended to enable all members to participate in equitable basis as in 1997 since some members who had joined the IMF after 1981 had not received any allocations" (Rangarajan and Patra 48). As described SDRs will simply be a complement to other reserve assets unless SDR allocations are made in a counter-cyclical way and still be able to maintain the global demand for reserves.

In using SDRs in this way it is believed by some that it can reduce the three problems of the current international monetary system. The first one would be limiting the role of the U.S. at the center of the system, reducing the need for reserve accumulation from developing countries, and "it can contribute to reducing the recessionary bias associated with the asymmetric-adjustment problem" (Ocampo 213). Besides being used in a counter-cyclical way SDRs would have to be further reformed and need all financing to be done by the IMF in SDRs, requiring global monetary creation. According to IMF economist Jacques Polak, lending during a crisis would be a creation of SDRs and will be destroyed once the loans are paid for. To reduce the accumulation of reserves in developing countries the IMF will need to change its conditions

for borrowing as some developing countries have experienced an aggravated crisis from IMF interventions. Furthermore, there would need to be more rules for allocations to prevent higher-income countries from receiving more if it wants to alleviate the asymmetries between surplus and deficit countries. A proposed solution to this is not allowing large surplus or high reserve countries to receive SDR allocations.

Shortcomings of SDRs

For SDRs to be a viable alternative to the current system it would require immense changes, one of them being that there needs to be an increase in the demand for this global reserve asset. As they currently are, SDRs play a limited role in countries' reserve holding and when they are held, are only used for transactions related to the IMF. A proposed solution to this is to allow the asset to be held by the private sector, but this raises the issue of "speculative changes in the demand for this global reserve asset" (Ocampo 215). In addition, the acceptance of a global reserve asset based on the IMF might not be easily accepted by some countries, one being the U.S. There was already a failure to make the SDR play a major role in the 1970s due to the reluctance of the U.S. "to guarantee the solvency of the substitution account as it would place the whole burden of exchange rate risk as well as less costly interest rate risks on this country" (Erten 19).

To make the use of SDRs more common it would require international trade and finance to be denominated in SDRs, yet the issue would remain that its primary weakness is that it is not an actual currency, which would make it difficult to become the international monetary reserve. Therefore, the use of SDRs requires that it be a mixed system with the support of national or regional currencies supporting it for private transactions. Following this option means that it requires a substitution account that permits central banks to exchange currencies for the SDRs.

The creation of a substitution account would allow countries to exchange dollars for SDRs and was originally proposed to allow dollar holders to present their excess dollar holdings to the IMF in return for an equivalent value of SDRs. However, this does not solve the problem, “the role of a substitution account in a dollar-centered system would be entirely to increase the portfolio choices available to reserve holders” (Williamson 7). The use of SDRs played a less important role when it was first introduced since the U.S. congress would not allow the U.S. to have an open-ended financial obligation to guarantee the dollar value of the reserves deposited in the substitution account. Thus being that the creation of a substitution account might be costly for the United States will make the use of SDRs still play a less significant role.

Multi-currency system

The mixture of SDRs and multi-currency together has been advocated as a solution to make the idea appealing to reserve issuing currencies. The issue with the mixture of these alternatives is that both present flaws, leading to a system that will bring potential problems for the future. Over time other currencies have competed with the dollar as an option for international payments or to be held as a reserve asset. Two of the advantages that come with a multi-currency system are the diversification of foreign exchange reserves and fixed parities. The option of a variation of currencies as reserves alleviates the instability of the reserve currency as explained by the Triffin Paradox. In addition, it takes the pressure off a fixed parity system which is one of the reasons for the demise of the Bretton Woods agreement. However, there should be caution since exchange rate flexibility among alternative currencies would likely increase exchange rate volatility in the major world currencies.

In sum, a multi-currency system would only be advantageous in managing the instability of the U.S. dollar exchange rate vis a vis other currencies but would still nonetheless fail to

address the other shortcomings of the international monetary system. Countries that have persistent trade deficits will still need to adjust through deflationary means and face real international pressure to adjust, which is not something experienced by surplus countries. Hence, this system would not prevent developing nations from unilaterally accumulating international reserves, and since the dominant currency is the U.S. dollar it will not correct the U.S. trade deficit. Even with the competition from currencies such as the euro, yen, or pound the dollar continues to dominate as shown by the financial crisis of 2008 which showed “no alternative to the market for US Treasury securities in terms of liquidity and depth” (Ocampo 212). The proposed solutions all have flaws that might not lead to a more stable system than the one we currently have.

Chapter 2: Origin of the Bretton Woods System

The Bretton Woods system was ratified in July 1944 after the meeting of delegates from forty-four countries in Bretton Woods, New Hampshire to be the new international monetary system and counteract a perceived contractionary bias within the international monetary and trading systems. Indeed, after World War II many countries saw the opportunity for a new international monetary system that would improve on the inefficiencies of the Gold Standard system and instead create an efficient foreign exchange system, prevent competitive currency devaluations, and promote international economic growth. Furthermore, the two primary architects of the Bretton Woods system were John Maynard Keynes, advisor to the British Treasury, and Harry Dexter White, chief international economist at the United States Treasury Department. The importance of Keynes was that he proposed a system known as “Bancor” that was ultimately rejected and instead what resulted was the Bretton Woods system, where the role of the dollar was at the center of the system. In addition, the creation of the International Monetary Fund (IMF) and the World Bank Group were created as part of the Bretton Woods agreement. The IMF was first introduced in 1945, with the purpose of monitoring exchange rates and lending reserve currencies to countries with balance-of-payments deficits. Conversely, the World Bank Group was made to ensure financial assistance for World War II reconstruction and economic development of the less developed countries.

By 1958, twelve years after the system had been hatched it had become fully functional and currencies were convertible, meaning “the system had become a gold-dollar standard whereby the United States pegged the price of gold, and the rest of the world pegged their currencies to the dollar” (Bordo 317). Within the Bretton Woods system there was the following monetary hierarchy: the dollar became the currency that settled international balances and then

dollars were convertible to gold at a fixed exchange rate of $35 an ounce. To ensure compliance with the system, the IMF would enforce the rules via surveillance, and hence twenty-nine members agreed to keep their currencies fixed but adjustable to the dollar within a certain band because it was believed that having a currency pegging regime would provide currency stabilization for financing and trade of goods and services. Under the Bretton Woods system, each country was required to monitor and maintain its currency pegs, minimizing international currency exchange rate volatility, and aiding international trade.

<u>Rules of the Bretton Woods System</u>

Optimism over the Bretton Woods system was high since the period before had witnessed great instability in the international economic system following the end of World War I, which segued to the worldwide Great Depression of the 1930s. Largely a cooperative system, Bretton Woods marked a time when, “there has never been another moment in the history of international cooperation that matches the late-Second World War and the early post-war years” (Ocampo 1). Accordingly, it oversaw more than a decade of expansion in international trade and finance as well as the surprisingly rapid construction of Western Europe and Japan. Yet, to understand the collapse of the Bretton Woods system it is necessary to have an explanation of the rules that it entailed as this will help in understanding its demise.

As part of improving the gold standard, countries would be able to make balance-of-payments adjustments while maintaining the ability to pursue macroeconomic policies for internal balance. As mentioned, a key goal of the system was to focus on exchange rates and prevent competitive devaluations as shown by freely fluctuating exchange rates in the 1930s. A solution to this was the use of an adjustable peg regime that is a fixed exchange rate that can be readjusted and in this case with a maximum limit of one percent above or below the

dollar. Furthermore, to maintain exchange rates countries needed to be assured of a reliant supply of official monetary reserves so another aim of the Bretton Woods system was to ensure a source of reserve supply. The development of the IMF was created to fill this role and through the Articles of Agreement, “there was an attempt to provide a source of reliable reserves of national currencies which was made available to the countries experiencing a deficit” (Igwe 113). In addition, the members were only allowed to draw based on their quota, which also dictated their voting power within the IMF.

The Bretton Woods system was seen as a historical moment for international cooperation as governments committed to the responsibility of the international monetary order. Governments were not allowed to engage in currency practices that would be seen as manipulative. Overall, the system was viewed as a rule-based system with the characteristics of countries having an option of holding reserves in gold or dollars, while the U.S. reserves were based on its gold supply, so the role of the dollar was to defend a par value to gold than to another currency.

Imbalances

Similar to the prior system, the gold standard, a collapse was imminent as the Bretton Woods system evolved to a gold dollar standard. Thus, the system became reliant on U.S. monetary authorities following reasonable inflation policies to not exacerbate what was fundamentally an unstable system. The evolution of this system “imposed upon the United States an obligation to act “responsibly” (in particular, not to inflate unduly) and in the interest of the system as a whole” (Gowa 37). Furthermore, its resemblance to the gold exchange standard meant that it would face the difficulties of adjustment, confidence, and liquidity, a point Triffin heavily critiqued. The Bretton Woods system became recognized as a system dominated by the

U.S. and rather than having adjustable pegs turned into a fixed exchange rate system. To further complicate the stability of the system, capital mobility was increasing, aggravating attempts of monetary authorities to maintain stable parities. While the system was praised for its cooperation, it may have required too much in terms of coordination of national policies at a time when countries were more committed to domestic growth.

Under the Bretton Woods system, deficits were supposed to be limited by the size of a country's foreign exchange reserves and if it needed adjustment it would turn to the IMF for additional reserves. However, reserves would only be supplied with the acceptance of domestic policy conditions seeking the elimination of external deficit balances and producing foreign exchange earnings to repay the loan. While this lessened imbalances it did not eliminate them but instead kept them small since they were determined by reserves and IMF drawings. Furthermore, similar to the gold standard the asymmetrical adjustment problem remained, global surpluses and the size of imbalances were determined by the limit of a country's deficit. The non-reserve countries' objective was to avoid balance of payments deficits that would occur if they followed expansionary monetary policies. In following expansionary monetary policy, decreases in the interest rate led to capital flight and increased pressures on the currency depreciating so to defend the fixed exchange rate countries would need to follow contractionary monetary policy. These adjustments made following the Bretton Woods system rules difficult since a consequence of contractionary monetary policy could lead to a rise in unemployment and a contraction of the economy.

The role played by the U.S. being the reserve currency excused it from having to adjust its balance of payments deficit. While other countries intervened in foreign exchange markets to buy or sell dollars to maintain their exchange rate between the band, the U.S intervened in the

gold market to maintain the dollar fixed to gold at $35 an ounce. Of course, this privilege held by the U.S. was envied by some countries that viewed the U.S. as exporting inflation to surplus countries through their deficits. While the Bretton Woods system allowed for the U.S. to have persistent deficits, confidence in its deficit would start being of concern to the world. As the balance of payments deficit increased, dollar liabilities increased and eventually would reach a point where the dollar would not be convertible to gold due to a low gold stock. This led to the problem that eliminating the U.S. deficit would create a liquidity shortage so the main concern during the 1960s was how to provide liquidity. The Triffin Paradox stems from Robert Triffin's view of the dollar at the center of the Bretton Woods system and of the global liquidity demand for the dollar as it was the intervention currency. While the U.S. could have persistent deficits under the gold-dollar standard, Triffin pointed out that "this limit was determined by the willingness of the surplus countries' central banks to continue to accumulate dollars when their outstanding claims exceeded the United States' ability to meet these claims in gold at parity" (Kregel 5). The collapse of the system proved Triffin was correct and began in 1965 with the U.S. deciding to pursue expansionary monetary and fiscal policies.

The Collapse of the Bretton Woods System

Before the collapse of the Bretton Woods system, 1968-1971, "by 1964, official dollar liabilities held by foreign monetary authorities exceeded the U.S. monetary gold stock" (Bordo 16). The end of the Bretton Woods system began in 1965 with the center country experiencing a rise in inflation from the Vietnam War and President Johnson's domestic reform, "Great Society". Furthermore, as inflation increased there was fear that contractionary monetary policies were required would lead to rising unemployment and so fear from backlash against the Federal Reserve bank made preventing inflation difficult. As mentioned, an important aspect of the

Bretton Woods system was the rule that countries were required to follow prudent monetary and fiscal policies consistent with the official pegs, a rule that the U.S. was not adhering to. The consequence of rising inflation was inflation spread throughout the world from rising U.S. balance of payments deficits, generating surpluses in other countries. While the collapse was aggravated by the U.S., other events would also contribute to the collapse of the system.

In November 1967, the devaluation of the sterling put additional pressure on the dollar as it was considered the second reserve currency and seen as the first line of defense against the dollar. Furthermore, the pressure would be added through the London gold market that consisted of the London Gold Pool which was the pooling of gold reserves by eight countries, including the U.S. Federal Reserve and the Bank of England, with the sole purpose of defending the price of gold at $35 an ounce. The devaluation of sterling accelerated the run on physical gold causing the Gold Pool to be disbanded and leaving the U.S. to pressure other monetary authorities to not convert their dollars to gold. In addition, during this time France and Germany would be faced with currency crises, followed by an increase in the U.S. deficit that resulted in Germany along with other countries stopping intervention in the foreign exchange markets and letting their currencies float. In 1971, France and Britain would try to convert dollars into gold but President Nixon would decide to suspend gold convertibility on August 15, 1971.

The collapse of the Bretton Woods can be summed up in three points, the first as already mentioned was inflation of the key currency of the system. The U.S. inflation from 1965 to 1971 was enough to trigger speculative attacks on the monetary gold stock and one of the reasons for the collapse of the Gold Pool. Moreover, rather than maintaining price stability, it further used inflationary monetary policy. Furthermore, surplus countries were beginning to be reluctant to hold increasing dollar inflows and revalue their currencies, showing glimpses of a decentralized

system. While the system was designed to try to correct the flaws of the gold standard, it inherited two flaws that contributed to the breakdown of the Bretton Woods system. The rule-based system consisted of dollars being exchanged for gold and this placed the U.S. under constant pressure for convertibility, and the other flaw was the transition from a narrow adjustable peg to a fixed exchange rate without effective adjustment.

Current International Monetary System and the Dollar

After the demise of the Bretton Woods system, there was a managed floating exchange rate system and left a dollar standard without the use of gold. As a consequence of the failure to commit to a new stable system of exchange rates and agreement over a new international monetary system, what resulted is a system that is often referred to as the "non-system". The fundamental features of the current international monetary system are that the system is based on a fiat currency, that can be challenged by other currencies, the freedom for each country to choose its desired exchange rate (as long as the country avoids manipulation of their exchange rate), and effective convertibility of the current account of most countries. Furthermore, there is surveillance of the country's macroeconomic policies but with limited policy coordination that occurs without the involvement of the IMF. This "non-system" presents three problems, the asymmetric adjustment problem, a national currency used as an international currency, and an inequality bias. As mentioned in the above chapter there have been proposed solutions to tame the international monetary system but have been insufficient.

The first issue mentioned is the asymmetric adjustment problem between deficit and surplus countries, where the adjustment burden is on the deficit country whereas the surplus country faces no pressure to correct their imbalances. This was evident under the Bretton Woods system since "deficit countries were forced into an excessive contraction in domestic incomes in

order to return to balance and repay the IMF" (Kregel 6). Currently, the size of a country's current account deficit has no limits since it is based on the willingness of international investors to finance it, and is not dependent on the surplus of another country. For example, a country with a growing external deficit that is experiencing rapid growth and rising interest rates will see an increase in capital inflows from an interest-rate differential to other countries. To reduce or reverse the imbalance the use of contractionary monetary policies will only increase capital inflows, worsening the external balance and appreciating its currency. The appreciating currency is a further incentive for international investors to finance the external deficit that is being supported by the increasing foreign exchange reserves that further strengthen the belief of investors in this process. During the Bretton Woods system, the U.S. imbalance was based on the confidence that central banks had in the U.S. to liquidate dollar liabilities to the gold parity, now they are determined by the confidence of investors in a country's ability to increase foreign borrowing to meet its debt commitments. Thus, when investors realize that they can longer profit from the rising imbalances, a country will experience capital outflows and so the size of imbalances can also be limited by a financial crisis. However, a country can avoid a financial crisis by establishing an external surplus and increasing its foreign reserves but this further increases global imbalances.

As imbalances are a problem in the present international monetary system so is the U.S. dollar which serves as the center currency but is also a national currency. The current system similar to that of the Bretton Woods system has the dollar at the center and requires the U.S. to have persistent external deficits. As Triffin noticed during the Bretton Woods, it was impossible to have the dollar as the source of global liquidity and at the same time have the dollar's value fixed to gold when there was a growing global economy that required an expansion of

international liquidity. This is known as the Triffin Paradox, and while the dollar does not defend the value of gold, to have an expanding global economy there needs to be an increase in the reserve currency. However, the increase in the reserve currency causes it to have an unstable value and so the Paradox arises that it is impossible to have an increasing amount of international liquidity and a stable international monetary system. Furthermore, having an international monetary system that has a reserve currency that is also a national currency means that the world economy is subject to the monetary policy of the main reserve-issuing country, currently the U.S. This should be of concern as it was the imprudent fiscal and monetary policies of the U.S. that initiated the collapse of the Bretton Woods system, so the stability of the system can be inconsistent with the monetary policy objectives of the major reserve issuing country.

The inequality bias refers to emerging and developing countries' need to self-insure through reserve accumulation which is these countries lending to rich countries at low-interest rates. Most of these countries follow an export-led development strategy by promoting exports using competitive exchange rates. This strategy results in current account surplus and increases in foreign exchange reserves that can be used against strong boom-bust cycles of global finance and “this potentially increases the policy space they have to undertake countercyclical macroeconomic policies during ‘sudden stops’ in external financing” (Ocampo 211). In addition, reserve accumulation shows the lack of control over the imbalances present in the current system as well as their resilience to adopt IMF conditions to correct the imbalances. As mentioned, the world economy is hostage to the monetary policy of the main reserve issuing country with little regard to its international spillover, something emerging economies criticize as they are not taken into consideration of the possible effects on their economies, urging for better representation.

While in the current system the U.S. dollar can be challenged by other currencies to play a more important role in the global economy this has not been the case as the U.S. dollar is still the dominant currency. As seen in Figure 1, an index displaying the usage of international currencies, displays the top five currencies that are used with the most frequency internationally and are the U.S. dollar, euro, pound sterling, yen, and Chinese renminbi. From this graph, it is evident that for the past twenty years the dominance of the U.S. dollar has remained stable with a value of 75, and the currency that is closest to the U.S. dollar is the euro but only has a value of about 25 still far from playing a major role internationally. Another aspect of the system is the freedom of a country to choose its desired exchange rate whether floating, managed, or fixed, but increases in capital mobility and sudden capital reversals means more volatility in exchange rates and crisis.

The U.S. being the reserve currency indicates that if its focus shifts on domestic monetary policies and not issuing more currency, exchange rates will become more volatile since the system does not have ample liquidity for the needs of international trade. A look at the exchange rate of the euro, pound sterling, yen, and renminbi to the dollar will show the volatility of its exchange rates through its variance. The euro seems to have a constant value with the dollar although when compared to the trendline it shows that there are fluctuations of the currency, and is also true for the pound, yen, and renminbi. The variance for the euro was .02, and for the pound was .03, it is not relatively high with a possible explanation being that both the euro region and the UK are debtors to the world. However, when looking at the exchange rate of two surplus countries, Japan and China, the variance was 5,178.4 and 4.23 respectively. This shows that the yen and renminbi are much more volatile exchange rates, and provides an explanation for high international reserves. In the case of Japan, an exporting country, the increase in

international reserves are used to prevent major increases in the value of its currency affecting its exporting capabilities. The volatility of exchange rates to the dollar makes international trade and investment decisions more difficult, further contributing to the issues of global imbalances between deficit and surplus countries, and the inequality bias.

Figure 1: Index of International currency usage (2000-2020)

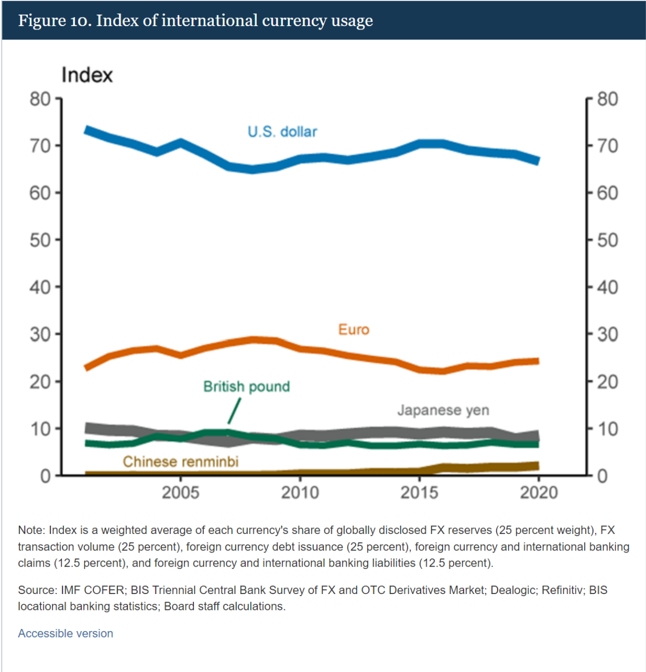

Figure 2: Euro vs Dollar Exchange rate (1999-2022)

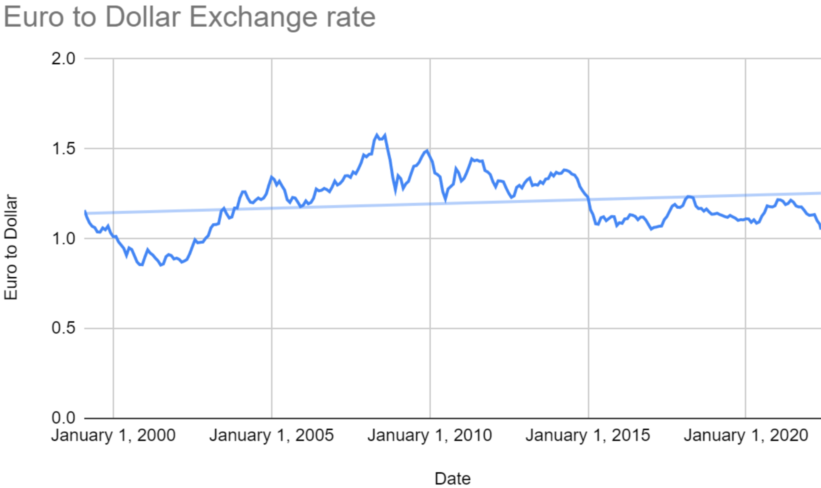

Figure 3: Pound vs Dollar Exchange Rate (1990-2022)

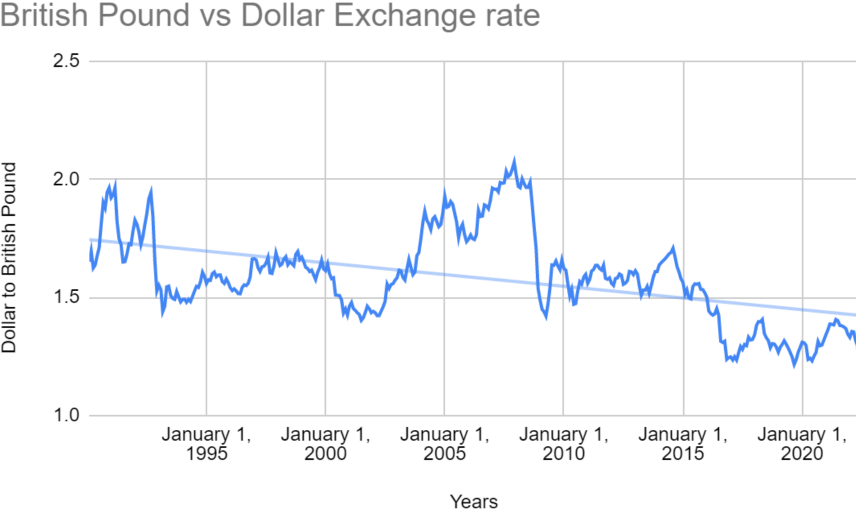

Figure 4: Yen vs Dollar Exchange Rate (1971-2022)

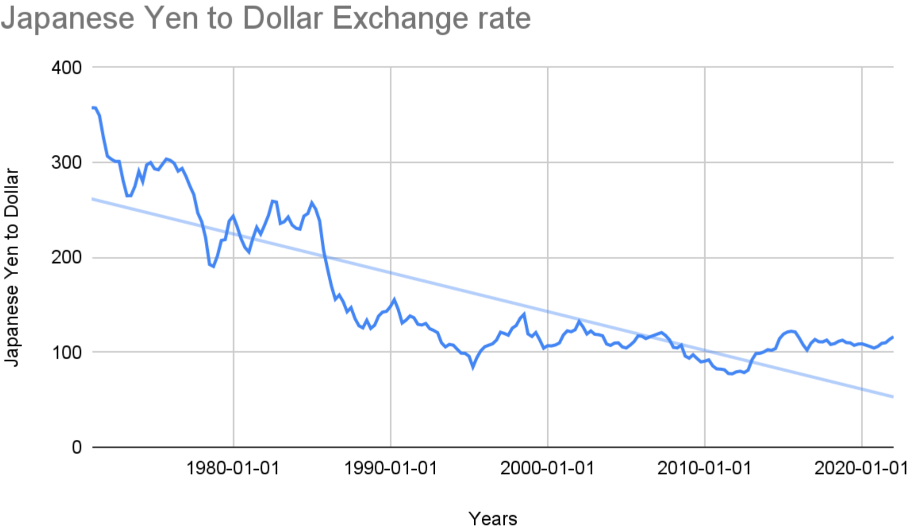

Figure 5: Renminbi to Dollar Exchange Rate (1981-2022)

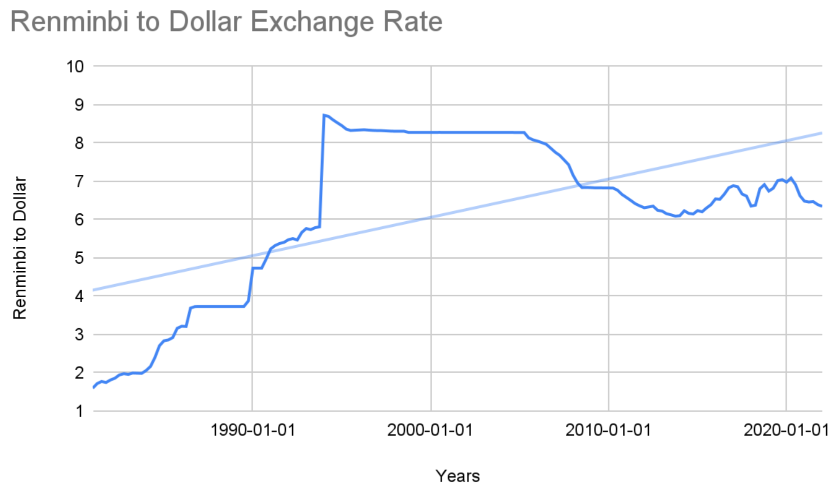

Figure 6: Descriptive Statistics Euro to Dollar

	Euro to Dollar
Mean	1.19740574
Standard Error	0.009427265131
Median	1.194605
Mode	0.853592
Standard Deviation	0.1580297603
Sample Variance	0.02497340513
Kurtosis	-0.3576220113
Skewness	-0.1248469462
Range	0.723186
Minimum	0.853592
Maximum	1.576778
Sum	336.471013
Count	281
Largest(1)	1.576778
Smallest(1)	0.853592
Confidence Level	0.01847743966

Figure 7: Descriptive Statistics Pound to Dollar

	Pound to Dollar
Mean	1.584198692
Standard Error	0.009737372088
Median	1.579236
Mode	1.21583
Standard Deviation	0.1920509972
Sample Variance	0.03688358551
Kurtosis	-0.3171321922
Skewness	0.2879949439
Range	0.85637
Minimum	1.21583
Maximum	2.0722
Sum	616.253291
Count	389
Largest(1)	2.0722
Smallest(1)	1.21583
Confidence Level	0.01908524929

Figure 8: Descriptive Statistics Yen to Dollar

	Yen to Dollar
Mean	157.2621951
Standard Error	5.025997487
Median	120.8
Mode	120.8
Standard Deviation	71.96133268
Sample Variance	5178.433402
Kurtosis	-0.2181231458
Skewness	1.067604561
Range	280.35
Minimum	77.34
Maximum	357.69
Sum	32238.75
Count	205
Largest(1)	99.09
Smallest(1)	100.4
Confidence Level	9.850955074

Figure 9:Rennminbi to Dollar

	Renminbi to Dollar
Mean	6.209946061
Standard Error	0.1602036161
Median	6.6235
Mode	3.7314
Standard Deviation	2.057852708
Sample Variance	4.234757769
Kurtosis	-0.4596498128
Skewness	-0.8072848144
Range	7.125
Minimum	1.5986
Maximum	8.7236
Sum	1024.6411
Count	165
Largest(1)	8.7236
Smallest(1)	1.5986
Confidence Level	0.3139990875

Chapter 3: International Clearing Union and Bancor

Following the collapse of the Bretton Woods system and the adoption of the current international monetary system, there has been criticism over the international financial structure which recurs after international financial crises. The proposed solutions to make the system more stable have been insufficient to correct the problems of the current system. Triffin, who was highly critical of the Bretton Woods system, saw the need for a system that was not dependent on a national currency and was influential in the creation of SDRs. The IMF controlled the SDRs, the only true global reserve asset created, but this would not be the case if Keynes' proposal called "Bancor" would have been adopted at the Bretton Woods conference. Certainly, in the finalization of the Bretton Woods agreement, Keynes' concerns about the disequilibrium in the balance of payments between countries was intended to be controlled with the creation of the IMF. The purpose of the IMF during the Bretton Wood system was to monitor exchange rates and lend reserve currencies to countries with balance-of-payments deficits, but over the years both the current and prior system has failed to correct persistent global imbalances and the asymmetrical adjustment problem. Therefore, looking at Keynes' proposal for an International Clearing Union (ICU) could provide a basis for a new international monetary system that is more stable and beneficial for the global economy.

The principles of the International Clearing Union and Bancor, the created reserve asset, were developed to correct the issues of the gold standard, which was ultimately also present in the Bretton Woods system. As shown in the gold standard and the Bretton Woods system, the main burden of adjustment was on the debtor country to correct its balance of payments deficit which is still relevant in the current international monetary system. Therefore, to correct the burden of adjustments the structure of the International Clearing Union had the main goal of

international balance as “he faulted the gold standard because savings by creditor countries in the form of holding of gold stocks reduced global liquidity, and thus the ability to finance global demand” (Kregel 291). Furthermore, Hjalmar Schacht's “Clearing House” system of bilateral clearing agreements would provide the basis for Keynes's International Clearing Union.

Essentially, the system would be similar to a barter system in terms of one trading transaction finding its counterpart in another trading transaction at a given point, and this would provide financial stability by balancing imports and exports. While it would be ideal for every trade transaction to find its counterpart if there was a deviation from balance it would be solved by “automatic financing of the debit countries by the creditor countries via a global clearinghouse or settlement system for trade and payments on current account” (Kregel 294). A key aspect of the International Clearing Union is the likeness to a barter system, eliminating the need for national currency payments. The transition away from the use of national currencies to pay for imports or exports would mean that there is no longer the need for foreign currencies or reserve balances, also eliminating volatile exchange rates.

Framework of the International Clearing Union

To further understand the process of the International Clearing Union it is important to note that the banking principle was the heart of the system which is the concept of neutralizing debits and credits of a common balance sheet or clearinghouse. Hence, the Clearing Union was similar to that of a bank, a global bank, with the exception that member countries did not have to allocate any money to the Clearing Union. This proposal, despite being drafted a while ago, possesses features that could provide a more stable international monetary system. The previous and current system have all faced the asymmetric adjustment problem but in the International Clearing Union, this becomes a symmetric burden. Furthermore, it addresses the issue of having

a national currency as a reserve currency since it requires no currency, instead, it uses an international unit of account. In ensuring that the balance of payments of countries is not in disequilibrium, it also addresses the inequality bias that emerging and developing countries face. To further demonstrate the functionality of the Clearing Union it will be described in terms of the three problems the current international monetary system faces.

The main goal of the International Clearing Union is international balance so the Clearing Union would be a global bank, if a country had a trade deficit it would have a negative balance on its account. On the other hand, a country with a trade surplus would have a positive balance credited to its account. In a simple example, an export from country A to country B financed through the Clearing Union would result in two entries of the same amount, country A would have a credit balance and country B a debit balance. The Clearing Union as the global bank indicates that all transactions are done through the Clearing Union making it a multilateral system. Using the previous example, being that the system is multilateral in nature means that country A could spend its Bancor credit with another country other than B, and country B could export to another country other than A to reduce its debit account. This concept ensured that the burden of adjustment would be shared as it would ensure surplus countries generate credits to buy imports from countries with a debit balance. However, if a country desired it could use the credit to purchase foreign assets although they would be limited by the size of the credit the country has with the clearinghouse. Also, the Clearing Union had an adjustment to balance itself in the form of penalties, once the limit on the size of multilateral debits and credits was agreed upon, “penalties in the form of interest charges, exchange rate adjustments, forfeiture, or exclusion from clearing, would be applied and the outstanding balances would automatically be

reduced” (Kregel 295). The use of these penalties was to ensure that no country increased its debt or accumulated credits indefinitely.

As pointed out by Triffin, a national currency should not be a reserve currency since it provides an unstable system in need of liquidity and stable exchange rates. The proposal by Keynes sought to not repeat the same mistake of the gold standard with the pound at the center. Thus, the Clearing Union would use Bancor that instead of being an international currency that can be bought, sold, or traded, is a unit of account used to track international flows of credits and debits, and would be fixed to a national currency. Furthermore, the creation of Bancor was not decided by a central authority nor would its balances be decided by the Clearing Union. Bancor could only be created when a surplus country exported to a deficit country and would be destroyed when a deficit country exported to a surplus country. The destruction of Bancor signified a balance with the ideal scenario being that all bancor balances were zero indicating that all imports and exports were balanced. Despite not using a national currency, “the Clearing Union would be able, in principle, to finance international trade and its expansion, without the need of any given amount of money” (Fantacci 11). A system without the use of an international reserve currency meant “there would be no need for a market for ‘foreign’ currency or reserve balance, and thus no impact of volatile exchange rates on relative prices of international goods or tradable and nontradable goods” (Kregel 294). The exchange rate levels and adjustments would be determined by multilateral negotiations and would have to be aligned within reasonable limits to not stray from external balance.

This system's extreme focus on international balance also addresses the inequality bias that emerging and developing countries face, “there can be no currency wars, no wall of money, and no interest rate arbitrage” (Kregel 301). The countries with an export-led development

strategy rely on competitive exchange rates that result in surpluses and high levels of foreign exchange reserves but in this system currency fluctuations would be limited. However, should there be a constant imbalance the correction of exchange rate misalignments would occur, for a persistent deficit a devaluation, and a persistent surplus an appreciation. Furthermore, these countries would no longer be on the periphery and subject to the reserve issuing countries' monetary policies since the system is not reliant on an international reserve currency. The Clearing Union proposal offers a stable exchange rate that "would limit currency speculation and offer all countries the ability to pursue full employment policies without the risk of seeing their currency depreciate and lead to a crisis" (Gnos and Rochon 629). Moreover, countries would no longer need to self-insure since there are limits to foreign investments by their global current account position, and the size of credits the country has.

Could The International Clearing Union work?

The proposal by Keynes of an International Clearing Union would ultimately be rejected and what resulted was the Bretton Woods system that would face similar difficulties to the gold standard system. As described the proposed plan seems more adequate to provide a more stable international monetary system than the Bretton Woods system and the current system yet, it was rejected at the Bretton Woods conference and then not implemented after the collapse of the Bretton Woods system. Of the many possible reasons for its rejection, the most obvious ones are that it failed to reflect the existing geopolitical balance of powers. Being that the conference was held at Bretton Woods, New Hampshire reflects that the U.S. was the main power and the system to be inherited at that time would need to reflect this.

An unrivaled rise in U.S. power occurred at the end of World War II, with the U.S. as the leading industrial power and country with the most official gold reserves. Thus, the U.S. would

want to exert this dominance in a system and so U.S. cooperation was required. The U.S. at the time was one of the world's biggest creditors so a system that provided automatic credits to debtor countries to spend was a proposal that the U.S. was not willing to accept. Being that Keynes was representative of Britain his proposal seemed biased as it benefited the UK, "since it meant that the financing of imports required for reconstruction would be automatically available without the need to accumulate dollar balances through export sales (or by borrowing from the United States)" (Kregel 292). This would not be accepted by the U.S. which viewed the proposal as a commitment to finance Europe's reconstruction. The current system has the U.S. benefit from the exorbitant privilege of having its currency as the international reserve currency and this could be reflected in the Bretton Woods negotiations as the U.S. desired control that comes about with the dollar playing the central role.

The need for cooperation from the U.S. meant that they had to accept the principles behind the International Clearing Union and that included the banking principle. This proposal by Keynes was centered around a notional unit of account that does not require backing by reserves or capital to support its stability. At the time, the U.S. might have been unfamiliar with the principles of the system, as well as "US representatives' resistance to the use of "strange" money in the form of the nonexistent bancor-clearly U.S. bankers only put faith in "real" money such as gold or pieces of fiduciary paper backed by real reserves" (Kregel 7). In addition, there might have been a lack of understanding of the overdraft system that is embedded in the Clearing Union. In a domestic overdraft system, a bank might lend to a client in excess of their deposits, so fear arose that unlimited overdrafts would lead to a loss of control over the money supply with risks of inflation. However, Keynes' view was that if credits remained within the Clearing Union, then the Union would never find itself in difficulty.

While his proposal was rejected, at the time it was a radical proposition but its features have the basis to provide a more stable system than the current one. Recently, there is a company in the private sector that functions based on similar features of the Clearing Union, showing that Keynes' proposal could be more than a radical proposal. The Global Telephony Company, Webtel.mobi, has the first global digital currency and uses a global clearing system similar to the structure and operation of Keynes's proposed system at the Bretton Woods conference. The clients of Webtel.mobi (MW) can load their accounts with stored credit through stored value, bank transfer, or cash payment to pay for their mobile service. This sounds normal and similar to any mobile provider but the company also permits its members to transfer credit balances from their accounts to another member through its internal system transfer, “Inter Closed Loop Member Transfer” (ICLM). Therefore, the MW system makes credit and debit adjustments according to the banking principle, “by executing debits and credits on members’ accounts resulting from their transfer instructions, WM executes the role of bookkeeper in the “closed loop clearing system” (Kregel 8). Their clearing system represents Keynes' idea that if credits are not allowed to be removed outside the clearing system but only transferred, the system will never find itself in difficulties.

In terms of its digital currency, the members' initial accounts are denominated in their home currency but can hold balances in multiple foreign currencies within their accounts. This is possible because members can swap or purchase other currencies from their Inter Closed Loop Member Transfer through global foreign exchange markets or swap arrangements at rates agreed to between members. All these transactions are adjusted in the members' accounts, while the overall MW system’s balance remains stable. The WM acts as a clearinghouse mechanism for its clients "who are free to engage in global transactions in any currency, carried out in real time (in

1/100th of a second), at any time, from anywhere in the world" (Kregel 8). Furthermore, the digital currency is similar to Bancor, since it is convertible from any country's currency into a globally acceptable store value and medium of exchange. The system of Webtel.mobi's has been labeled as the 21st-century version of Keynes's International Clearing Union and showing that the proposal rejected could provide the framework for a more stable international monetary system.

Conclusion

The current international monetary system that is referred to as the “non-system” presents flaws that prevent it from being a stable system that can foster global financial stability. There are three present problems in the system that are an asymmetric adjustment problem, the use of a national currency as an international reserve currency, and an inequality bias. While there have been proposed solutions such as policy coordination, the use of SDRs, and a multi-currency-based system these do not necessarily solve the current issues and present flaws of their own that might not lead to a more stable system than the current one.

Previous to the current system, the Bretton Woods system showed similarities since it saw the U.S. and its currency, the dollar, take the center role of the system. This system was a gold-dollar standard with the dollar-pegged to the price of gold at $35 an ounce, and the rest of the world pegged their currencies to the dollar. Therefore, the system was dominated by the U.S., and when subject to issues of adjustment and liquidity would contribute to the collapse of the system. The collapse of the system was aggravated by inflation in the key currency of the system and instead of maintaining price stability, it further followed expansionary monetary and fiscal policy. Furthermore, the system placed the U.S. under pressure as dollars were being exchanged for gold causing persistent deficits that were limited by the willingness of the surplus countries’ central banks to continue to accumulate dollars when their outstanding claims exceeded the U.S. ability to meet the claims at parity.

Following the collapse of the Bretton Woods system, rather than reforming a flawed system, it maintained the dollar at the center and is now a fiat currency. Moreover, in failing to address the issues of the Bretton Woods system it inherited the asymmetric adjustment problem, and a national currency used as an international currency. This also added another issue, that has

been caused by the imbalances present in the international monetary system, the inequality bias. The asymmetric adjustment problem refers to deficit countries facing pressure to readjust their imbalances and is normally done through a deflationary bias. Also, while the deficits in the Bretton Woods system were determined by the central banks' confidence, the present deficits are determined by investors' confidence and when they can longer profit that country will experience capital outflows. Thus, deficits are limited by either a financial crisis or establishing an external surplus and increasing its foreign reserves causing greater global imbalances. Furthermore, being that a national currency is the reserve currency, it is subject to the Triffin Paradox, that to have an expanding economy there needs to be an increase in the reserve currency, but the increase in the reserve currency causes it to have an unstable value.

Being that the system is dominated by a single currency, means that the world economy is hostage to the monetary policies of the main reserve issuing country. This raises the concern since the imprudent fiscal and monetary policies of the U.S. initiated the collapse of the Bretton Woods system, so the stability of the system can be inconsistent with the monetary policy objectives of the major reserve issuing country. Emerging and developing countries have been critical of the lack of consideration for the effect of these policies that results in their need to self-insure through reserve accumulations. Before the adoption of the Bretton Woods system, a proposal by Keynes was rejected that sought to prevent the problems present in both the Bretton Woods system and the current international monetary system.

The International Clearing Union and Bancor could provide the framework for a more stable international monetary system since the proposal addresses the relevant problems of an asymmetrical adjustment burden, a national currency, and inequality bias. It is a system where external adjustment occurs by incentivizing surplus countries to find outlets to spend their

credits. Furthermore, it has an adjustment to balance itself in the form of penalties that would ensure that no country increases its accumulated debt or credits indefinitely. Being that the system is not dependent on a national currency there is no need for an international reserve currency, there is no market for exchange rates, or exchange rate volatility. The main goal of the Clearing Union is balance by ensuring that the balance of payments of countries is not in disequilibrium. This is beneficial to developing and emerging countries as it offers a stable exchange rate with limited currency speculation and the ability to pursue full employment policies without the risk of currency depreciation and crisis.

While reforming the international monetary system might be difficult, the Clearing Union provides the framework for a more fundamentally stable international monetary system. Currently, a Global Telephony Company has the first global digital currency and uses a global clearing system similar to the structure of the proposal made by Keynes at the Bretton Woods conference. The system followed by Webtel.mobi has been recognized as the 21st-century version of Keynes's International Clearing Union, showing that his radical proposal is still alive and functional. Thus, reforming the international monetary system to the International Clearing Union or a system built around its framework, there is now a real-world blueprint of how the International Clearing Union can be functional and how it could provide a mechanism to keep global imbalances under control and eliminate a national currency as a reserve currency providing greater financial stability to the global economy.

Works Cited

Bordo, Michael D. "Is There a Good Case for a New Bretton Woods International Monetary System?" *The American Economic Review*, vol. 85, no. 2, 1995, pp. 317–22, http://www.jstor.org/stable/2117940. Accessed 16 May 2022.

______.The Operation and Demise of the Bretton Woods System; 1958 to 1971 (February 2017). NBER Working Paper No. w23189, Available at SSRN: https://ssrn.com/abstract=2924279

Campanella, Edoardo. "The Triffin Dilemma Again". *Economics*, vol 4, no. 1, 2010. *Walter De Gruyter Gmbh*, https://doi.org/10.5018/economics-ejournal.ja.2010-25.

Chandrasekhar, C. P. "Global Imbalances and the Dollar's Future." *Economic and Political Weekly*, vol. 45, no. 23, 2010, pp. 47–57, http://www.jstor.org/stable/27807106. Accessed 16 May 2022.

Claude Gnos, and Louis-Philippe Rochon. "Reforming the International Financial and Monetary System: From Keynes to Davidson and Stiglitz." *Journal of Post Keynesian Economics*, vol. 26, no. 4, 2004, pp. 613–29, http://www.jstor.org/stable/4538898. Accessed 13 May 2022.

Cohen, Benjamin. *The Triad And The Unholy Trinity: Problems Of International Monetary Cooperation*. 2002, https://www.semanticscholar.org/paper/The-Triad-and-the-Unholy-Trinity%3A-Problems-of-Cohen/bca335e4fc0fc64bc344c2543ca5ac3a47df385f.

Costabile, Lilia. "Current Global Imbalances And The Keynes Plan". *SSRN Electronic Journal*, 2007. *Elsevier BV*, https://doi.org/10.2139/ssrn.1051401.

D'Arista, Jane. "Dollars, Debt, and Dependence: The Case for International Monetary Reform."

Journal of Post Keynesian Economics, vol. 26, no. 4, 2004, pp. 557–72, http://www.jstor.org/stable/4538894. Accessed 15 May 2022.

Erten, B., 2013. Overcoming the Technical and Political Difficulties of Using SDRs for Development Purposes. Retrieved from https://policycommons.net/artifacts/1121466/overcoming-the-technical-and-political-difficulties-of-using-sdrs-for-development-purposes/1717430/ on 16 May 2022. CID: 20.500.12592/zprjtz.

Fantacci, Luca. "Why Not Bancor? Keynes's Currency Plan As A Solution To Global Imbalances". pp. 1-17., Accessed 16 May 2022.

Frankel, Jeffery, 2015. "The Plaza Accord, 30 Years Later," NBER Working Papers 21813, National Bureau of Economic Research, Inc.

Gowa, Joanne. "The Bretton Woods Regime and the United States." *Closing the Gold Window: Domestic Politics and the End of Bretton Woods*, Cornell University Press, 1983, pp. 33–59, http://www.jstor.org/stable/10.7591/j.ctvr7f40n.5. Accessed 16 May 2022.

Igwe, Isaac. "History Of The International Economy: The Bretton Woods System And Its Impact On The Economic Development Of Developing Countries". *Athensjournals.Gr*, 2018, https://www.athensjournals.gr/law/2018-4-2-1-Igwe.pdf.

Kregel, J. "Emerging Markets and the International Financial Architecture: A Blueprint for Reform". *Brazilian Journal of Political Economy*, vol. 35, no. 2, Apr. 2015, pp. 285-0, https://centrodeeconomiapolitica.org/repojs/index.php/journal/article/view/225.

_____."Keynes'S Clearing Union Is Alive And Well And Living In Your Mobile Phone |Levy Economics Institute". *Levyinstitute.Org*, 2021, https://www.levyinstitute.org/publications/keyness-clearing-union-is-alive-and-well-and-l

iving-in-your-mobile-phone.

_____."Another Bretton Woods Reform Moment: Let Us Look Seriously At The Clearing Union | Levy Economics Institute". *Levyinstitute.Org*, 2022, https://www.levyinstitute.org/publications/another-bretton-woods-reform-moment-let-us-Look-seriously-at-the-clearing-union.

Ocampo, José. (2011). Special Drawing Rights and the Reform of the Global Reserve System. 10.7312/columbia/9780231157643.003.0013.

_____. "A brief history of the international monetary system since Bretton Woods," WIDER Working Paper Series wp-2016-97, World Institute for Development Economic Research (UNU-WIDER).

_____. *Resetting the International Monetary (Non)System* (Oxford, 2017; online edn, Oxford Scholarship Online, Nov. 2017), http://dx.doi.org/10.1093/oso/9780198718116.001.0001, accessed 15 May. 2022.

Plosser, Charles. "Some Thoughts On International Monetary Policy Coordination". *Cato.Org*, 2018, https://www.cato.org/cato-journal/spring/summer-2018/some-thoughts-international-monEtary-policy-coordination.

Rangarajan, C., and Michael Debabrata Patra. “Can the SDR Become a Global Reserve Currency?” *Economic and Political Weekly*, vol. 47, no. 11, 2012, pp. 41–51, http://www.jstor.org/stable/23214653. Accessed 16 May 2022.

Smaghi, Lorenzo. "The Triffin Dilemma Revisited". *Bis.Org*, 2011, https://www.bis.org/review/r111005a.pdf.

Triffin, Robert. "Gold And The Dollar Crisis: Yesterday And Tomorrow". *Ies.Princeton.Edu*,

1978, https://ies.princeton.edu/pdf/E132.pdf.

Williamson, John. "Understanding Special Drawing Rights (Sdrs)". *Piie.Com*, 2009, https://www.piie.com/publications/pb/pb09-11.pdf.

Xiaochuan, Zhou. "Reform The International Monetary System". *Bis.Org*, 2009, https://www.bis.org/review/r090402c.pdf.